

AMENDMENTS TO THE CLAIMS

1. (Currently amended) An electronically adjustable attenuator, comprising:

an input terminal and an output terminal;

~~a high frequency signal path having a capacitive divider~~ resistive-capacitive voltage divider having at least a first capacitor coupled in parallel with a low frequency signal path having a resistive divider with the resistive-capacitive divider network having one end coupled to said input terminal and a common center tap coupled to said output terminal between said input and output terminals for conveying high and low frequency signals from said input terminal to said output terminal and at least a first resistor coupled in parallel with said at least first capacitor for conveying low frequency signals between said input terminal and said output terminal with said at least first capacitor and said at least first resistor having a common center tap coupled to at least a second capacitor coupled between said common center tap of said capacitor and resistor and a point of reference potential and at least a second resistor coupled to said common center tap;

a variable gain amplifier having an input terminal coupled to said common center tap of said at least first capacitor and resistor and having output terminal coupled to the other end of ~~the resistive divider~~ said at least second resistor for providing gain adjusted low frequency signals; ~~signals;~~

an inverting amplifier for receiving said gain adjusted low frequency signals, and generating an inverted representation of said gain adjusted low frequency signals at an output; and

a resistive path coupled between said output of said inverting amplifier and said input terminal of said attenuator for conveying said inverted representation of said gain adjusted low frequency signals to said input terminal of said attenuator, wherein said attenuator is compensated by adjusting gain of said low frequency signals conveyed by said low frequency signal path.

2 - 4. (Cancelled)

5. (Currently amended) The attenuator of claim 4 ~~1~~, wherein:

said ~~second~~ resistive path includes a ~~second~~ resistive voltage divider having a center tap; and said attenuator further includes,

a ~~second~~ capacitive divider having a first end coupled to said input terminal of said attenuator, a center tap, and a second end couple to a point of reference potential, said

center taps of said ~~second~~ resistive divider and said ~~second~~ capacitive divider being coupled together; and

a selection circuit having a first input coupled to said ~~center tap of said first resistive divider~~ common center tap of said at least first capacitor and resistor, a second input coupled to said center tap of said ~~second~~ resistive divider, and an output selectively coupled to one of said ~~first and second~~ common center tap of said at least first capacitor and resistor and said center tap of said resistive dividers divider.

6 - 9. (Cancelled)

10. (Currently amended) The attenuator of Claim 9 1, further including:

offset circuitry for adding an offset signal to said gain adjusted low frequency ~~compensation signal signals~~ and for adding an inverted representation of said offset signal to said inverted representation of said gain adjusted low frequency ~~compensation signal signals~~.

11. (Currently amended) An electronically adjustable attenuator comprising:

an input terminal and an output terminal;

a high frequency signal path having a capacitive voltage divider coupled in parallel with a low frequency signal path having a resistive voltage divider;

said resistive and capacitive dividers have a first common input terminal coupled to said input terminal, a common center tap coupled to said output terminal for conveying high and low frequency signals from said input terminal to said output terminal, and a second common terminal coupled to a point of reference potential;

a lowpass filter for selecting low frequency signals; and

a variable gain amplifier having an input terminal coupled to said common center tap and an output terminal coupled through said lowpass filter to said output terminal of said attenuator for providing said gain adjustment for said low frequency signals.

12. (Previously amended) An electronically adjustable attenuator comprising:

an input terminal and an output terminal;

a high frequency signal path coupled between said input and output terminals for conveying high frequency signals from said input terminal to said output terminal;

a low frequency signal path coupled in parallel with said high frequency signal path for conveying low frequency signals between said input terminal and said output terminal;

a first amplifier; wherein

said high frequency path comprises a capacitor disposed between said input terminal and an input of said first amplifier, and a feedback capacitor disposed between an output of said first amplifier and said input of said first amplifier;

said low frequency path comprises a resistor disposed between said input terminal and said input of said first amplifier, and a feedback resistor disposed between said output of said first amplifier and said input of said first amplifier; and

a variable gain amplifier for adjusting low frequency gain, said variable gain amplifier being coupled within said low frequency path between said output of said first amplifier and said feedback resistor.